ROHDE & SCHWARZ Make ideas real



# **R&S®FPL1-B9 INTERNAL GENERATOR** Internal signal generator for more analysis possibilities



### Scalar network analysis made simple

Equipped with the R&S®FPL1-B9 option, the R&S®FPL1000 offers an internal CW source and a tracking generator for quick and easy measurements of frequency response, filters and attenuation. The n-dB down marker determines the 3 dB bandwidth of a bandpass filter at the press of a button. Precision is enhanced by through, short and open normalization methods.

## The perfect choice for

Research, education,	Gene	eral purpose		Key specifications		
service and	signa	al analysis and		Frequency	5 kHz to 7.5 GHz	
maintenance	demodulation			Frequency resolution	0.01 Hz	
Automated tests due	Basi	Basic function test		Level setting range	–60 dBm to 0 dBm	
easy integration	in R&D			Level setting resolution	0.1 dB	
				Absolute level uncertainty	< 0.5 dB	
Models				Phase noise at 1 GHz		
R&S®FPL1-B9 (1323.1925.03) for R&S®FPL1003		5 kHz to 3 GHz		(0 dBm, 1 MHz offset)	–130 dBc/Hz (typ.)	
R&S®FPL1-B9 (1323.1925.07) for R&S®FPL1007		5 kHz to 7.5 GHz		Harmonics	< 30 dBc	
R&S <sup>®</sup> FPL1-B9 (1323.1925.07) for R&S <sup>®</sup> FPL1014		5 kHz to 7.5 GHz		$(100 \text{ kHz} \le \text{f} \le 7.5 \text{ GHz})$		
R&S®FPL1-B9 (1323.1925.07) for R&S®FPL1026		5 kHz to 7.5 GHz		Nonharmonic spurious (0 dBm)	-45 dBc (typ.)	

Your benefit	Features
Multiple modes	<ul> <li>Independent CW source</li> <li>Tracking generator (TG)</li> </ul>
Spectral purity	High dynamic range for your measurements
Characterization of your circuits	Powerful tracking generator for gain, frequency response and return loss measurements
More space on your test bench	The instrument includes a signal generator for general purpose applications, which saves you space



#### Block diagram of TG mode



Completely separated hardware units and digital control provide good isolation, less crosstalk and the option to use TG frequency offset

#### Filter qualification with R&S<sup>®</sup>FPL1-B9



For easy filter qualification, simply define your limit lines for filter characterization, use the n-dB down function to determine the 3 dB points and save the result as a transducer factor

#### All-in-one dialog for easy operation



Clear menus allow quick configuration of usage, settings, calibration and the state of the internal generator



The R&S<sup>®</sup>FPL1000 with R&S<sup>®</sup>FPL1-B9 takes up 40 % less space than comparable analyzers on a typical 80 cm workbench.

Model configuration information	
Description	Item
Signal and spectrum analyzer, 5 kHz to 3 GHz	R&S®FPL1003
Signal and spectrum analyzer, 5 kHz to 7.5 GHz	R&S®FPL1007
Signal and spectrum analyzer, 5 kHz to 14 GHz	R&S®FPL1014
Signal and spectrum analyzer, 5 kHz to 26 GHz	R&S®FPL1026
Options	
OCXO frequency reference	R&S®FPL1-B4
Additional interfaces	R&S®FPL1-B5
Internal generator	R&S®FPL1-B9 1) 2)
GPIB interface	R&S®FPL1-B10

<sup>1)</sup> Factory fitted option

 $^{2)}$  Use 1323.1925.03 for R&S°FPL1003 and 1323.1925.07 for R&S°FPL1007, R&S°FPL1014, and R&S°FPL1026

#### Rohde & Schwarz representative

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